

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 26-51 without prejudice or disclaimer, and AMEND claims 1, 2, 45, 50, 52 and 67 in accordance with the following:

Claim 1 (Currently Amended): A content reproducing apparatus, comprising:
a data storage unit ~~storing and/or reading~~arranged to store data; and
a presentation engine ~~controlling~~arranged to control the data storage unit according to a command program contained in an input markup document,
wherein the presentation engine comprises:

a parser for verifying a syntax of the markup document;
a document object model (DOM) tree forming unit for receiving the
markup document from the parser, for interpreting a structure of the markup
document, and for extracting the command program; and
an interpreter for receiving the extracted command program from the
DOM tree forming unit to control the data storage unit.

Claim 2 (Currently Amended): The content reproducing apparatus of claim 1,
wherein the markup document is input, via a digital content storage medium or a network
~~presentation engine comprises:~~

~~a parser verifying a syntax of the markup document;~~
~~a document object model (DOM) tree forming unit receiving the markup document from~~
~~the parser, interpreting a structure of the markup document, and extracting the command~~
~~program; and~~
~~an interpreter receiving the extracted command program from the DOM tree forming unit~~
~~to control the data storage unit.~~

command program is written in a script language.

Claim 4 (Original): The content reproducing apparatus of claim 1, wherein, according to the command program, the presentation engine generates cookie information comprising predetermined target information and stores the cookie information in the data storage unit.

Claim 5 (Original): The content reproducing apparatus of claim 4, wherein the data storage unit comprises a non-volatile data storage portion and a volatile data storage portion, where according to cookie storage attribute information in the command program, the presentation engine stores the cookie information in one of the non-volatile data storage portion and the volatile data storage portion.

Claim 6 (Original): The content reproducing apparatus of claim 4, wherein the presentation engine incorporates content identification information into the cookie information and stores the cookie information in the data storage unit.

Claim 7 (Original): The content reproducing apparatus of claim 6, wherein the presentation engine searches the data storage unit for the cookie information with the same content identification information as input content identification information and reads the cookie information.

Claim 8 (Original): The content reproducing apparatus of claim 4, further comprising:
a decoder decoding a read content,
wherein the command program is a command program which commands that predetermined target information be fetched from the decoder, commands the cookie information comprising the predetermined target information be generated, and commands the generated cookie information be stored in the data storage unit.

Claim 9 (Original): The content reproducing apparatus of claim 4, wherein the command program is a command program which commands that the cookie information comprising predetermined target information be generated and commands the generated cookie information be stored in the data storage unit.

Claim 10 (Original): The content reproducing apparatus of claim 4, wherein the presentation engine receives data from a user, and the command program is a command program which commands that the cookie information comprising predetermined target information in the input data from the user be generated, and commands the generated cookie information be stored in the data storage unit.

Claim 11 (Original): The content reproducing apparatus of claim 1, wherein the command program comprises a cookie reference command program, where according to the cookie reference command program, the presentation engine searches the data storage unit for at least one cookie information item, and extracts the predetermined target information from the at least one cookie information item.

Claim 12 (Original): The content reproducing apparatus of claim 1, wherein the command program comprises a cookie deletion command program, where according to the cookie deletion command program, the presentation engine searches the data storage unit for at least one cookie information item and deletes corresponding cookie information.

Claim 13 (Original): The content reproducing apparatus of claim 4, wherein the cookie information comprises at least first information defining a content reproducing apparatus using the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target information and a value of the target information.

Claim 14 (Original): The content reproducing apparatus of claim 5, wherein the cookie information comprises at least first information defining a content reproducing apparatus using the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target information and a value of the target information.

Claim 15 (Original): The content reproducing apparatus of claim 6, wherein the cookie information comprises at least first information defining a content reproducing apparatus using

the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target information and a value of the target information.

Claim 16 (Original): The content reproducing apparatus of claim 7, wherein the cookie information comprises at least first information defining a content reproducing apparatus using the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target information and a value of the target information.

Claim 17 (Original): The content reproducing apparatus of claim 8, wherein the cookie information comprises at least first information defining a content reproducing apparatus using the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target information and a value of the target information.

Claim 18 (Original): The content reproducing apparatus of claim 9, wherein the cookie information comprises at least first information defining a content reproducing apparatus using the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target information and a value of the target information.

Claim 19 (Original): The content reproducing apparatus of claim 10, wherein the cookie information comprises at least first information defining a content reproducing apparatus using the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target information and a value of the target information.

Claim 20 (Original): The content reproducing apparatus of claim 11, wherein the cookie information comprises at least first information defining a content reproducing apparatus using the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target

information and a value of the target information.

Claim 21 (Original): The content reproducing apparatus of claim 12, wherein the cookie information comprises at least first information defining a content reproducing apparatus using the cookie information, and second information indicating a path of a markup document using the target information, and the target information comprises a name identifying the target information and a value of the target information.

Claim 22 (Original): The content reproducing apparatus of claim 13, wherein the cookie information further comprises third information defining a duration of the cookie information.

Claim 23 (Original): The content reproducing apparatus of claim 13, wherein if cookie information having the same first information and second information, and the same name to identify the target information as the cookie information generated according to the cookie generation command program exists in the data storage unit, the presentation engine overwrites the cookie information in the data storage unit with the generated cookie information.

Claim 24 (Original): The content reproducing apparatus of claim 11, wherein, according to the cookie reference command program, the presentation engine searches the data storage unit for at least one cookie information item with predetermined content identification information and extracts the predetermined target information from the at least one cookie information item.

Claim 25 (Original): The content reproducing apparatus of claim 24, wherein the presentation engine searches for the cookie information having the same name to identify the target information as in the command program.

Claims 26- 51 (Cancelled):

Claim 52 (Currently Amended): ~~An information storage medium of afor use in an interactive digital content reproducing apparatus comprising a data storage medium and a decoder,~~ the information storage medium comprising:

audio/video (AV) data; and
a markup document ~~reproducing~~which reproduces the AV data in an interactive manner,
the markup document comprising a command program which, when the information storage
medium is inserted into the content reproducing apparatus, is performed by the content
reproducing apparatus to control ~~the~~a data storage unit ~~of~~included in the content reproducing
apparatus.

Claim 53 (Original): The information storage medium of claim 52, wherein the
command program comprises content identification information.

Claim 54 (Original): The information storage medium of claim 52, wherein the
command program is written in a script language.

Claim 55 (Original): The information storage medium of claim 52, wherein the
command program comprises a cookie generation command program, where the cookie
generation command program performs control so that the content reproducing apparatus
generates cookie information comprising predetermined target information and stores the cookie
information in the data storage unit.

Claim 56 (Original): The information storage medium of claim 55, wherein the data
storage unit comprises a non-volatile data storage portion and/or a volatile data storage portion,
and the cookie generation command program performs a control according to cookie storage
attribute information in the cookie generation command program, where the content reproducing
apparatus stores the cookie information in one of the non-volatile data storage portion and the
volatile data storage portion.

Claim 57 (Original): The information storage medium of claim 56, wherein the cookie
generation command program performs a control so that the content reproducing apparatus
generates cookie information comprising content identification information and stores the cookie
information in the data storage unit.

Claim 58 (Original): The information storage medium of claim 55, wherein the cookie

generation command program performs a control so that the content reproducing apparatus generates cookie information comprising predetermined target information fetched from the decoder decoding the AV data and stores the cookie information in the data storage unit.

Claim 59 (Original): The information storage medium of claim 55, wherein the cookie generation command program performs a control so that the content reproducing apparatus generates cookie information comprising predetermined target information in the markup document.

Claim 60 (Original): The information storage medium of claim 55, wherein the cookie generation command program performs a control so that the content reproducing apparatus generates cookie information comprising predetermined target information in data input from a user and stores the cookie information in the data storage unit.

Claim 61 (Original): The information storage medium of claim 52, wherein the command program comprises a cookie reference command program, where the cookie reference command program performs control so that the content reproducing apparatus searches the data storage unit for at least one cookie information item and extracts predetermined target information from the at least one cookie information item.

Claim 62 (Original): The information storage medium of claim 52, wherein the command program comprises a cookie deletion command program, where the cookie deletion command program performs control so that the content reproducing apparatus searches the data storage unit for at least one cookie information item that matches the cookie information the cookie deletion command program commands to delete and deletes the at least one cookie information.

Claim 63 (Original): The information storage medium of claim 55, wherein the cookie generation command program performs control so that the content reproducing apparatus generates cookie information comprising first information defining the content reproducing apparatus using the cookie information, second information indicating a path of a markup document using the target information, and the target information, which is a name identifying

the target information and a value of the target information.

Claim 64 (Original): The information storage medium of claim 63, wherein the cookie generation command program performs control so that the content producing apparatus generates the cookie information further comprising third information defining a duration of cookie information.

Claim 65 (Original): The information storage medium of claim 62, wherein the cookie information comprises first information defining the content reproducing apparatus using the cookie information, second information indicating a path of a markup document using the target information, and the target information, which is a name identifying the target information and a value of the target information, and the cookie reference command program performs control to search for the cookie information having the same first information, second information, and the name identifying the target information as in the cookie reference command program and to extract the value of the target information.

Claim 66 (Original): The information storage medium of claim 62, wherein the cookie information comprises first information defining the content reproducing apparatus using the cookie information, second information indicating a path of a markup document using the target information, and the target information, which is a name identifying the target information and a value of the target information, and the cookie deletion command program performs control to search for the cookie information having the same first information, second information, and the name identifying the target information as in the command program and to delete the searched cookie information.

Claim 67 (Currently Amended): A computer readable medium ~~of a data storage unit~~ having embodied thereon a program for ~~a content reproducing method~~ reproducing interactive digital content in an interactive digital content reproducing apparatus, comprising:

receiving a markup document comprising a predetermined command program;
parsing to verify a syntax of the markup document;
extracting the command program by interpreting a structure of the markup document;
and

controlling ~~the~~ data storage unit included in the content reproducing apparatus,
according to the command program.